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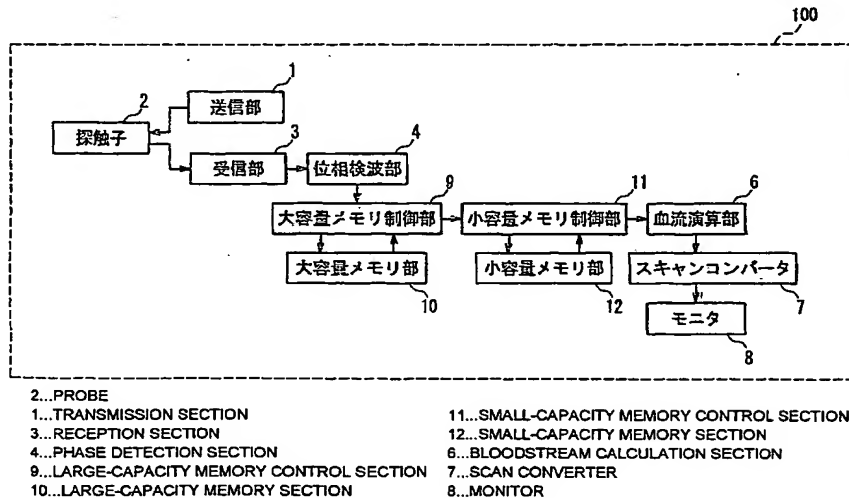
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- (51) 国際特許分類: A61B 8/06 (72) 発明者; および
(21) 国際出願番号: PCT/JP2004/001709 (75) 発明者/出願人 (米国についてのみ): 関 孝夫 (SEKI, Takao), 萩原 尚 (HAGIWARA, Hisashi).
(22) 国際出願日: 2004 年 2 月 17 日 (17.02.2004) (74) 代理人: 特許業務法人池内・佐藤アンドパートナーズ (IKEUCHI SATO & PARTNER PATENT ATTORNEYS); 〒5306026 大阪府大阪市北区天満橋1丁目8番30号OAPタワー26階 Osaka (JP).
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[続葉有]

(54) Title: ULTRASONIC DOPPLER BLOODSTREAM MEASUREMENT DEVICE

(54) 発明の名称: 超音波ドブラ血流測定装置



(57) Abstract: There is provided an ultrasonic Doppler bloodstream measurement device capable of performing high-speed calculation without being affected by a slow read/write speed even when using, as a buffer memory for calculating the bloodstream information, a memory having different characteristics of read/write speed in the row direction and the column direction. The device includes: a large-capacity memory (10) which is a memory having a two-dimensional address space, consists of a memory whose data read/write speed is different in the row direction and the column direction of the address space, and stores a detection signal; a bloodstream calculation section (6) for calculating the bloodstream information from the detection signal; a small-capacity memory (12) having a capacity greater than the data amount required for calculating a depth point of an examinee by the bloodstream calculation section (6); and a large-capacity memory control section (9) for performing data transfer only in the row direction from the large-capacity memory section (10) to the small-capacity memory section (12).

(57) 要約: 血流情報を演算する時のバッファメモリに、行方向と列方向の読書き速度が異なる特性を持つメモリを使用しても、遅い方の読書き速度の影響を受けずに高速演算ができる超音波ドブラ血流測定装置である。二次元のアドレス空間を有するメモリであって、前記アドレス空間の行方向と列方向とでデー

[続葉有]



SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.

MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG,
CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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添付公開書類:

— 国際調査報告書

2文字コード及び他の略語については、定期発行される
各PCTガゼットの巻頭に掲載されている「コードと略語
のガイダンスノート」を参照。

タ読み書き速度が異なるメモリで構成され、前記検波信号を格納する大容量メモリ部10と、検波信号より血流情報
を算出する血流演算部6と、血流演算部6で前記被検体の任意の深度の点を演算するために必要なデータ量以上
の容量を持つ小容量メモリ部12と、大容量メモリ部10から小容量メモリ部12へ、行方向でのみデータ転送を
行う大容量メモリ制御部9とを備える。

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/001709

A. CLASSIFICATION OF SUBJECT MATTER.

Int.Cl⁷ A61B8/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ A61B8/00-8/15

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2004

Kokai Jitsuyo Shinan Koho 1971-2004 Jitsuyo Shinan Toroku Koho 1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2002-534182 A (General Electric Co.), 15 October, 2002 (15.10.02), Full text; all drawings & WO 00/40995 A1 & US 6071241 A	1-9
A	Edited by The Japan Society of Ultrasonics in Medicine, "Shin Choonpa Igaku", Vol.1, Iyo Choonpa no Kiso, Igakushoin, 15 May, 2000 (15.05.00), pages 55 to 57	1-9
A	JP 2002-263104 A (GE Medical Systems Global Technology Co. LLC), 17 September, 2002 (17.09.02), Full text; all drawings (Family: none)	1-9

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search

15 April, 2004 (15.04.04)

Date of mailing of the international search report

27 April, 2004 (27.04.04)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

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Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/001709

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2000-339441 A (Kanda Tsushin Kogyo Kabushiki Kaisha), 08 December, 2000 (08.12.00), Full text; all drawings (Family: none)	1-9
A	JP 2002-530179 A (Acuson Corp.), 17 September, 2002 (17.09.02), Full text; all drawings & WO 00/31678 A1 & US 6349143 B1	1-9